

High-Risk Property

Definition

Certain items require special handling, control, and disposition because their unintentional or premature release could pose risks to the public, the environment, or the interest of the United States. These items fall under four general categories:

- items that may be dangerous due to chemical, radioactive, or biohazardous contamination
- classified equipment and materials
- weapons, munitions, or equipment with weaponry attached ("military property")
- materials, equipment, or technology that could be useful in a nuclear explosives program

Procedures for the first category are outlined at appropriate locations throughout the PMM, the LANL Environment, Safety, and Health Manual, the LANL Office Procedures Manual, and implementing procedures. The term "high-risk property" (HR) therefore will apply here only to military property and items in the fourth category. Specifically, these are items identified on the international Nuclear Suppliers Group's Trigger List or Dual Use Export Control Lists; the Department of State's U.S. Munitions List; the Department of Defense's Militarily Critical Technologies List; or items specially designed by LANL for use in its nuclear program.

The following types of items are exempted from the HR policy and procedures:

- miscellaneous tools and lab supplies, including glassware, circuit boards, and standard tools or hardware

Special Materials

- motor vehicles and other motor equipment
- office furniture and equipment, such as calculators, televisions, copiers, telephones, desks, and tables
- office supplies
- personal computer equipment with acquisition values below \$25,000
- recyclable and disposable materials

Additional types of items are exempted by manufacturer, model, and specifications when these are identified by nonproliferation or export control experts as not fitting the definition.

For purposes of HR policy, the term "release" means ownership of the item is given up by DOE to the recipient. The policy does not apply to releases to an item's manufacturer (i.e., returns for credit).

Policy

In addition to the controls placed on all LANL property (see "Property Control" in the "General Property Policies" chapter), the Laboratory will:

- prior to release, review *all* release documents and property to determine if any item is HR
- remove any markings identifying HR items as LANL property or nuclear-related prior to release regardless of cost, unless doing so would significantly damage the item
- except with special permission from DOE Headquarters, destroy all Trigger List, military or specially designed items rather than releasing them, unless stripped beforehand of the parts that cause them to fall in these categories

Special Materials

- ensure that HR items are accompanied at release by a warning that they are subject to export controls

Procedures

Any non-exempt item received at JCI Redistribution & Marketing (R&M) as part of the excess process or listed on a Shipping Manifest (SM) or other document for release is reviewed by an expert in nonproliferation and/or one in export control.

If an HR item other than a Dual-Use List item has been declared surplus (see Chapter XIV, "Excess Property"), R&M arranges for stripping, destruction or burial of the item. When appropriate, it uses the process outlined under "Contaminated or High-Risk Property" in Chapter XV, "Retirement of Property."

If, however, the item is being released to a specified recipient outside of DOE through an administrative transfer, donation, sale, or similar method, the reviewer contacts the person requesting the release. If the requester wishes to go forward with it, the SM is returned and he or she is advised to contact Property Management (PM). The requester must write a memo that:

- describes the item(s) to be released, including manufacturer, model, value, and the specifications which cause it to be on the Trigger List, if any
- provides the name, address, and phone number of the recipient and requester
- specifies the recipient's qualifications for use of the item
- specifies how the recipient will use the item

Special Materials

PM reviews the memo, requests revisions if needed, then signs it and forwards it to DOE/LAAO. If approval is received, a copy of the approval memo is attached to the SM and the reviewer allows shipment. Otherwise, or if the requester decides not to pursue release, the item is destroyed or buried.

Note: See also the section on "Exports" in Chapter XV, "Transporting Property."

Precious Metals

Definition

Precious metals are uncommon and highly valuable metals characterized by their superior resistance to corrosion and oxidation. These include gold, silver, and the platinum group metals: platinum, palladium, rhodium, iridium, ruthenium, and osmium.

The following policies also apply to alloys containing at least 50% precious metals. The policies do not refer to rare metals: cerium, niobium, germanium, yttrium, tantalum, and titanium.

Cross-reference:
41 CFR 109-27.53

Responsibilities

Precious Metals Control Officer

The Precious Metals Control Officer (PMCO), an employee of PM, or his or her designee is responsible for ensuring the:

- Laboratory's compliance with DOE policies concerning precious metals
- maintenance of perpetual inventory records of LANL precious metals stocks and transactions
- maintenance of a list of all precious metal property custodians
- training of precious metal custodians
- participation of PM in physical inventories
- unannounced inspections of custodian's stocks and records

Special Materials

- annual review of precious metals holdings for excess
- submission of annual forecasts of transactions with the DOE Precious Metals Pool
- in conjunction with BUS-1, reconciliation of precious metals holdings records with financial records

LANL must identify the PMCO in writing for the DOE Albuquerque Field Office. The PMCO generally delegates his or her duties to the property specialists (PS's).

Business Operations Precious Metal Custodian

The Business Operations Precious Metal Custodian (BUS PMC) manages the Laboratory's precious metals stock. This entails:

- implementing procedures for withdrawing or returning stock according to LANL policy
- maintaining accurate records of precious metals withdrawals, returns, acquisitions, and excessing
- oversight of an alternate who is given access to operate the precious metals vault in the BUS PMC's absence

Precious Metals Custodians

Precious Metals Custodians (PMCs) are designated by line managers to be responsible for each organization's holdings of precious metals. The PMC is responsible for:

- ensuring the organization's compliance with LANL policies concerning precious metals

Special Materials

- establishing a transactions system that assures accurate record-keeping of metal assignments to the organization's users
- operating the organizational stock, if any, according to LANL policies
- training users on LANL policies and procedures
- maintaining perpetual records of the organization's precious metals balances and transactions
- withdrawing only as much precious metals stock as required and returning excess amounts to Laboratory stock immediately
- conducting annual physical inventories using calibrated scales
- preparing organizational documents related to precious metals
- cooperating with the PMCO or PS's on all precious metals matters

Users

Persons authorized to use precious metals must be familiar with and follow all applicable LANL policies. In addition, they must maintain itemized lists with the following information about the metals in their possession:

- description
- location
- weight, to the nearest 0.1 gram
- category (clean or contaminated)
- type or form
- alloy content by percentage, if applicable
- time, location, and purpose of each use

Special Materials

Users must protect their holdings from theft, immediately return unneeded amounts, submit a Report of Expended Precious Metals when metal is used up (see "Expended Metals" below), and cooperate with inventories and audits.

Environmental Protection

The Environmental Protection group is responsible for recovering silver from used materials such as scrap film.

Acquisition

Laboratory

Laboratory organizations must acquire precious metals through Materials Management (MM). MM must contact the DOE Precious Metals Pool before buying on the open market to fill Laboratory precious metals needs.

Laboratory Stock

Policy

Only line managers with the appropriate authority on the Signature Authority System (SAS), or their designees, may withdraw precious metals from Laboratory stock.

Procedure

A requester contacts the BUS PMC to see if the material desired is already in Lab stock. If not, he or she completes a separate Purchase Request (PR; see Appendix) for each type of metal desired, obtains the necessary signatures, and forwards it to the BUS PMC. The PR must indicate:

- the type of metal
- weight in grams, if feasible given the metal's form
- quantity, if weight is not used

Special Materials

If the metal has become available in stock, the BUS PMC or alternate cancels the PR and issues the metal. If not, the PR is forwarded to the MM buyer for external acquisition.

When issuing precious metal from stock, the issuer first verifies on SAS that the requester has authority to receive the metal.

The issuer completes a Stock Issue Slip, Form 602 (see Appendix) listing the quantity issued, unit of issue, stock number, and description.

Organizational Stocks

Policy

Laboratory workers must receive written approval from their line managers to withdraw precious metals from organizational stocks.

Procedure

The line manager must provide and maintain the list of eligible users for the PMC through SAS. The line manager may choose to limit the amounts or types of metals the employee may withdraw.

The authorized user wishing to withdraw from stock contacts the PMC and follows the organization's transaction procedures.

Protection

Precious metals will be given exceptional protection. The PMCs must store metals in fireproof, combination-locked repositories to which only the line manager, custodian, and one alternate have the combination. The combination must be changed annually and whenever a combination holder is replaced.

Special Materials

Transfers

Transfers of precious metals between PMCs or organizations are documented with the Property Transfer Slip (PTS; see Appendix). It is strongly recommended that both PMCs weigh the amounts transferred to ensure that the PTS and their records are correct. A copy of the PTS is sent to PM.

Returns to Stock

Policy

The PMCO and each user organization will keep on hand only the minimum quantities of precious metals necessary to perform Laboratory work. Quantities of uncontaminated precious metal not needed currently or in the foreseeable future, including scrap, must be returned to organizational or LANL stock immediately.

The PMCO or designee will conduct an annual review of materials on hand to determine if quantities are excess to the Laboratory's needs. Excess stock must be returned to the DOE Precious Metals Pool or otherwise disposed of as requested by DOE/AL.

Procedure

Returned metals must bear a radiation monitor tag from the organization's Health Physics Monitor indicating that the material is free from radiological contamination. It also must be accompanied by certification from the user or appropriate monitor that the material is free from other chemical contaminants. The tag and certification must be no more than one week old.

When the metal is returned, the BUS PMC or alternate uses a calibrated scale to weigh the metal in the presence of the person returning it. If there are discrepancies between the weight recorded by the user and the weight recorded by MM, MM's figure is accepted as official. In that case, the user must initiate a PTS or a Report of Expended Precious Metals (REPM; see Appendix) as

Special Materials

appropriate to adjust the record of his or her holdings.

The receiver issues a Credit Slip, Form 247-R (see Appendix) to the organization returning the metal. The credit slip relieves the using organization of responsibility for the material. It indicates the type and form of metal, weight, stock number, and returning organization.

Expended Metals

Immediately after completing a job or experiment in which precious metals are used in such a way that they cannot be recovered, users must submit to PM an REPM. Exceptions (for users expending small amounts on a frequent basis, for example) must be obtained in writing from the organization's PA with approval from the PS.

The REPM indicates:

- type of metal
- organization
- cost code and program code
- total weight
- category (clean or contaminated)
- date and method of expenditure

It must be signed by the user, PMC, and line manager, and approved by the PMCO or PS. If the metal was contaminated and released for disposal, the REPM must be accompanied by a copy of the form provided by Waste Management when the metal was picked up (see "Contaminated and High Risk Property" in Chapter XV, "Retirement of Property," for approved forms).

Special Materials

Alloys

When precious metal is used to make an alloy, the user must request that the PMC process a PTS to remove the pure metal from the records and add the alloy. The PTS must indicate the metal content percentages within the alloy.

If the precious metal makes up less than 50% of the alloy, a REPM must be completed to remove the precious metal from the records.

Records

PMCs and the PMCO will maintain records of all additions, transfers, expenditures and modifications of precious metals under their control. These records shall be accurate to the nearest tenth of a gram (0.1 g) and include running inventory balances.

Recorded weights may be used in place of inventorial weights when metal is

- too fragile or contaminated to be handled
- encased in or affixed to equipment
- properly sealed in an envelope (see below)

Metal in or on an equipment item must be identified by type of metal, category, and recorded weight. If possible, this identification will be made on a label affixed to the item; otherwise, an itemized list detailing locations and filed with the PMC is acceptable.

The recorded weight of precious metal in an envelope will be acceptable if the following conditions are met:

- a control number is assigned
- the envelope lists the material type, category, form, and item number, and gross, net, and tare weights

Special Materials

- the envelope is sealed and taped or otherwise secured in a way that would indicate if the seal had been broken
- two persons witness the weighing, verify that the envelope is sealed properly, and sign it

Inventories

Policy

PMCs will conduct physical inventories of their stocks annually. PS's designated by the PMCO will observe the inventory and verify the results.

Procedure

The PS develops with the PMC a standard schedule for the inventories, a copy of which goes to the PA. The PS is responsible for notifying the PMC and PA of each upcoming inventory two weeks in advance.

During the inventory, precious metals not in use are weighed on calibrated scales. The weight and form is recorded on the inventory sheet (see Appendix, Precious Metal Audit) by type. Metals in use or too contaminated to weigh are inspected as best as possible and listed by their recorded weights, along with notations as to whether or not they were inspected.

Idle or damaged metals also are noted on the inventory sheet. The PMC must submit a written justification for retention of the metals to the PS or return them to Lab stock within five (5) business days.

The completed inventory sheet is signed by the PMC and PA and forwarded to the PS for review.

Special Materials

Audits

While verifying the inventory results (see above), the PS also reviews the records of each organization holding precious metal to ensure policy and procedure compliance.

In addition, the PMCO periodically conducts or directs the PS's to conduct unannounced audits of selected custodians.

Unlocated Precious Metal

If any amount of precious metals cannot be located within twenty-four (24) hours of an inventory, the PMC must report the discrepancy to Facilities, Safety & Security (FSS; see "Missing, Damaged, or Destroyed Property" in Chapter XV, "Retirement of Property").

FSS is responsible for reporting to the DOE any unlocated metals.

Iridium

Oak Ridge National Laboratory (ORNL) manages an iridium stock for a number of government contractors and agencies. LANL records of its holdings from that stock are reconciled monthly with ORNL records. Also, one of the semi-annual inventories of LANL iridium holdings is conducted in conjunction with ORNL. The inventory and all other procedures are the same as for other precious metals. The ORNL Office of Special Nuclear Materials notifies PM when a joint inventory is to take place and sends a representative to observe. The representative creates and distributes a report of that inventory's results.

Drugs and Supplies

Drugs

Policy

Organizations using controlled substances must establish procedures for protecting, properly using, and discarding those drugs in accordance with applicable laws and regulations. "Controlled substances" means any of those assigned "Bureau of Controlled Substance Code Numbers" as per 21 CFR 1308 — the "Schedule of Controlled Substances."

PM reviews organizational stocks and records annually to ensure proper control.

41 CFR 109-27.5010(a & b)

Needles & Syringes

Hypodermic needles and syringes must be locked away when not in use, and may be issued only to personnel having line manager approval. They should be disposed of in dedicated hard-sided containers, and should not be broken, recapped, or otherwise altered before disposal.

29 CFR 1910.1030 & 1450

41 CFR 109-27.5010(c)

Special Materials

Alcohol

Policy

Organizations using alcohol considered drinkable (i.e. ethanol) must establish procedures for protecting, properly using, and discarding it in accordance with applicable laws and regulations. This policy applies to quantities of a quart or more and to pint bottles with unbroken U.S. Internal Revenue Service (IRS) seals.

41 CFR 109-27.5010(b)

Procedure

The Laboratory's chemicals subcontractor, VWR, acquires and stores the Lab stock of alcohol, and maintains records with perpetual balances. LANL organizations must make all acquisitions of alcohol through VWR.

Each PA and any designated Alcohol Custodians (ACs) must ensure that:

- alcohol not in use is stored in a secured location
- records are maintained and kept secure at the point of issue that:
 - indicate for each withdrawal from alcohol stock the date of issue, quantity, and name of recipient
 - maintain a running perpetual balance
- when a bulk container is emptied, the AC evaluates the record and investigates any discrepancies between the recorded and actual quantities

Special Materials

- alcohol issued for use is stored in:
 - closed containers of less than one-quart capacity
 - pint bottles with broken IRS seals
- excess alcohol is returned to Lab stock at MM or disposed of according to Environment, Safety, & Health procedures

PM evaluates organizational records biennially during utilization reviews (see Chapter VI, "Utilization Reviews").